



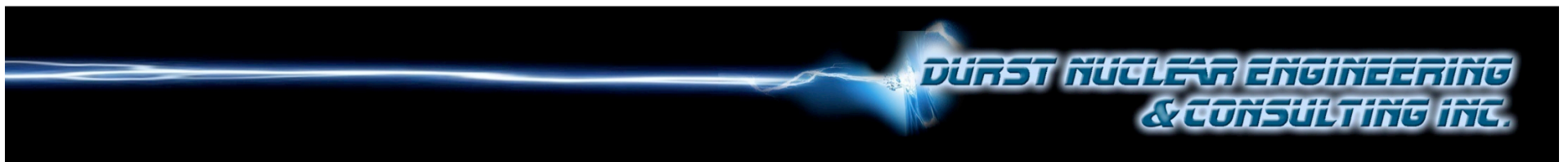
A Day in the Life of a Nuclear Safeguards Inspector

Human Capital Development Training Module

Philip Casey Durst –
DNE/Idaho National Laboratory (INL)

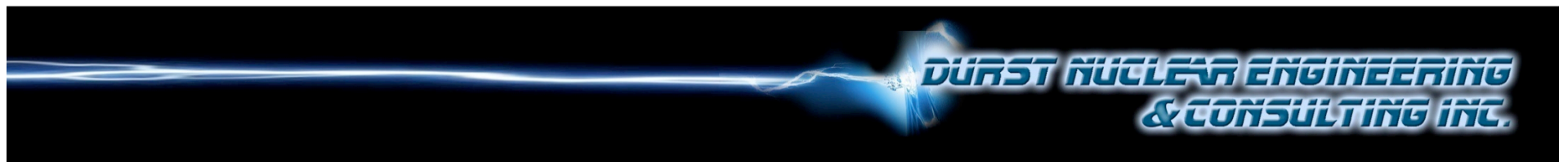
Background of Program

- Need to build a New Generation of Nuclear Safeguards and Non-Proliferation Experts
- The Current Experts are Aging
- Funded by the DOE/National Nuclear Security Administration (NNSA) Office of NA-243
- The U.S. actively and energetically Supports International Nuclear Safeguard and Non-Proliferation
- NNSA has prepared a Next Generation Safeguards Initiative (NGSI)



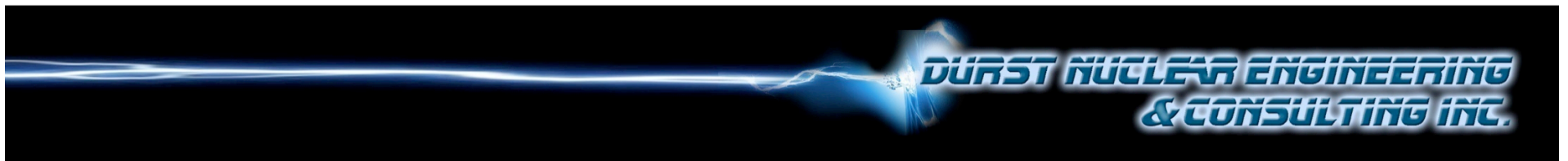
Background of Speaker

- Nuclear-Chemical Engineer
- 30 years in Industry, (Rockwell Hanford, Exxon Nuclear, Boeing, and the IAEA)
- 15 Years as a Nuclear Safeguards Inspector, Sr. Inspector and Country Officer with the International Atomic Energy Agency (IAEA) in Vienna
- Presently, a Consultant to the U.S. DOE, Idaho National Laboratory on International Safeguards Projects



Background Regarding the IAEA

- The International Atomic Energy Agency (IAEA) is a United Nations Organization based in Vienna, Austria
- The IAEA verifies that countries are compliant with their International Agreements regarding the safeguarding of their nuclear material and facilities
- These Agreements are concluded pursuant to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)
- The IAEA Department of Safeguards has 250 designated safeguards inspectors for this purpose
- The IAEA continuously recruits for this position

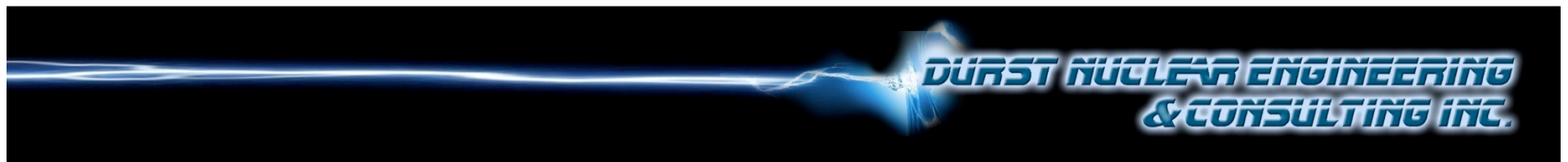


A Day in the Life – The Late Night Call

Note – the following is an example of a day in the life of a Nuclear Safeguards Inspector

The Call:

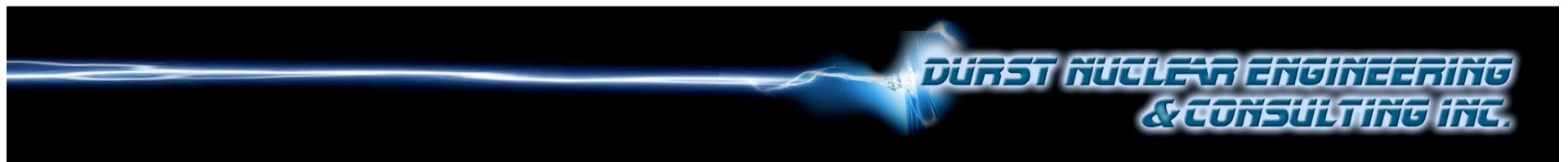
- Call Received at home from the Head of the Tokyo Regional Office (ca. 20:00, Sunday)
- Assignment conveyed over the telephone
- Design Information Verification (DIV) Activity needs to be performed in Northern Japan
- Safeguards Inspectors perform DIV to verify that nuclear facilities are being constructed and operated as declared



A Day in the Life – Early Morning Preparations

Early Morning Run to the Office:

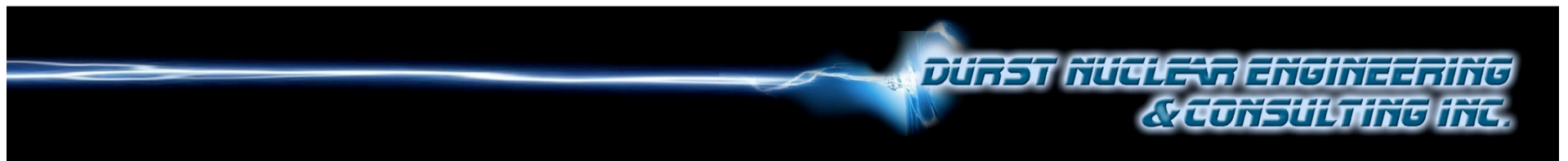
- 04:30 – Wake-up at apartment
- 06:00 – Run to the Tokyo Office
- Need to pick up procedure for 3-Dimensional Laser Range Finder (3DLR) for DIV and other supplies
- 07:00 - Run to the train station and purchase tickets for bullet-train to travel to Hachinoe (near Misawa)
- 07:30 - Train booked for trip to Misawa
- 08:00 Depart for Misawa via Hachinoe



A Day in the Life – Travel to Inspection Location

Early Morning Train and Taxi Rides

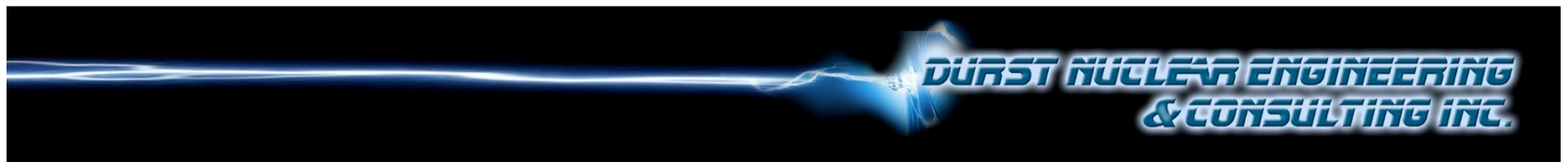
- 10:30 – Arrival in Misawa
- 11:00 – Travel to the Rokkashomura Reprocessing Plant (RRP) Site for DIV by Taxi
- 12:00 – Arrival at RRP Site
- 12:15 – Badge-in and Escort from facility gate to the inspector's shift office
- 12:30 to 13:00 – Lunch in Company Cafeteria
- 13:15: - Start of DIV Activity with Operator's Support and Escort



A Day in the Life – Perform Inspection

DIV Activity

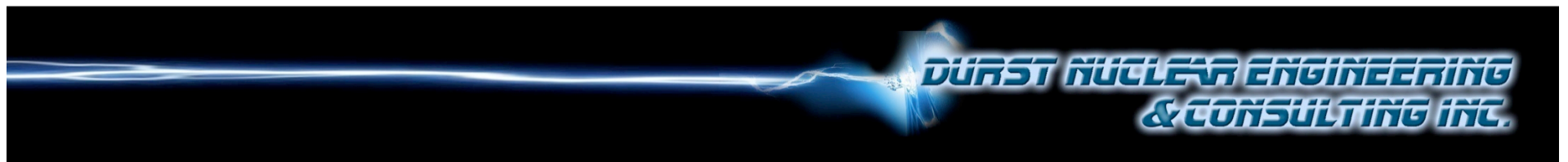
- Need to Survey Process Cells under construction to confirm construction matches declared design
- 13:30 – Access facility change room and don protective clothing and equipment
- 13:45 – Acquire Radiation Dosimeter from Health Physics
- 14:00 – Walk to Survey Location under Construction
- 14:15 - 16:15 – Survey Area using the 3DLR
- 16:30 – Return to IAEA Inspector's Office and file drawings and survey information. Secure Files.



A Day in the Life – Inspection Wrap-up

Wrap-up Activity and Return Home

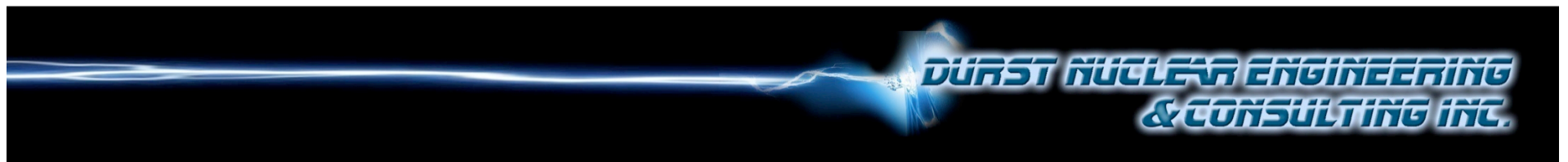
- 17:00 – Ask questions of Operator regarding any anomalous findings or inconsistencies
- 17:30 – Leave Nuclear Facility for Misawa
- 18:30 – Arrive in Hachinoe/Misawa by Taxi
- 19: 20 – Travel from Hachinoe to Tokyo
- 21:30 – Arrive in Tokyo
- 22:00 – Arrive at apartment by Taxi



A Day in the Life – File Inspection Report

The Next Day

- 08:30 – Arrive in Tokyo Office
- 10:00 – File Inspection Report on-line using secured computer
- 12:30 – File notes for next Scheduled Debriefing – to discuss the Inspection/DIV
- 17:00 – Call Vienna/HQ Regarding any Issues Discovered during the Inspection/DIV
- 17:30 – Return to the apartment,....and wait for the next call



An Inspector's Life

For the Record

- IAEA inspectors spend between 80 to 120 days in the field (on the order of 1/3 of a year)
- This includes weekend days, holidays and summer vacation days
- The business travel puts considerable demands on families, relationships and child-rearing
- Regardless – the Job is very, very Purposeful and Fulfilling
- Engineers, Physicists, Chemists, and Accountants are all needed and recruited – see www.bnl.gov/ispo

